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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/067,186	02/04/2002	David P. Parks	2577	7122
7590 11/10/2004				
A. Burgess Lowe 101 East Maple Street North Canton, OH 44720		EXAMINER PHAM, MINH CHAU THI		
		ART UNIT 1724		PAPER NUMBER
DATE MAILED: 11/10/2004				

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/067,186

Applicant(s)

PARKS ET AL.

Examiner

Minh-Chau T. Pham

Art Unit

1724

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 28 October 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) ☒ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

After a thorough consideration of the Amendment After Final filed on October 28, 2004, the finality of this patent application is hereby withdrawn and the prosecution is reopened.

***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 27, 28, 30, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giannetta et al (6,334,881 B1) and George et al (5,507,847).

Giannetta et al discloses a filtration bag for a commercial and residential vacuum cleaner comprising a receptacle for collecting dirt particles and the receptacle being formed from a composite sheet comprised of at least one layer of expanded polytetrafluoroethylene and at least one substrate layer (see Abstract, col. 1, lines 10-14; col. 2, lines 58-62), and a support layer comprising a non-woven polyester, polypropylene, polyethylene, fiberglass or microfiberglass, bonded to one side of a porous expanded PTFE membrane (col. 2, lines 31-33 and lines 58-62). George et al discloses a filtration layer including a microporous fluoropolymer, such as expanded polytetrafluoroethylene (ePTFE) (see Abstract; col. 4, lines 26-29 and lines 40-43) which has efficiency of at least 99.97% at 0.3 microns at a 10.5 ft/min flow rate, more preferably, the efficiency is >99.99% at 0.1 microns at 10.5 ft/min (col. 4, lines 34-35 and lines 57-59). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a filtration bag made of expanded PTFE since it is well-known in the art that the use of expanded PTFE membrane greatly

enhances the performance of the filter elements because the particles collected on the surface of the ePTFE, rather than in the depth of the elements as is occurring in the absence of the ePTFE layer (see Giannetta et al, col. 1, lines 49-53).

Claims 1-26, 29, 31 and 34 are again rejected under 35 U.S.C. 103(a) as being unpatentable over Giannetta et al (6,334,881 B1) and George et al (5,507,847), as applied supra, in view of any one of Requejo et al (5,090,975; Abstract; 22, 23 & 24 in Fig. 2; col. 1, lines 15-24; col. 7, lines 40-56), Zhang (6,156,086; Abstract; col. 3, line 35 through col. 4, line 9; col. 8, lines 51-58) and Bosses (5,080,702; Fig. 1; col. 3, line 56-66; col. 4, lines 19-20), and further in view of Maeoka et al (6,030,484; Abstract; col. 1, lines 5-10, lines 29-35 and line 61 through col. 2, line 15; col. 2, lines 26-29) and Wnenschak et al (6,110,243; col. 4, lines 7-46).

Any one of Requejo et al, Zhang and Bosses discloses a filtration bag for a floor care appliance comprising a closed receptacle for collecting dirt particles having an inlet opening for allowing a dirt laden air stream to enter. Requejo et al further disclose the bag comprising cellulose or synthetic fibers such as polyolefin, and the front panel portion and bottom panel portion sealed together by folding and an adhesive for by mechanical means such as sewing or by thermal bonding. Zhang discloses the filter bag comprising polyolefin and the sidewalls of bag are joined by seams via thermal bonding method. Bosses discloses the filter bag can be made out of wood paper, hemp paper or any other filter paper or fabric well-known in the art. Bosses further discloses a vacuum cleaner comprising a suction nozzle, a motor fan assembly and a filtration bag. Either Requejo et al or Zhang discloses a method of making a filtration

bag comprising the steps of providing a sheet of composite material, folding sheet of composite material, sealing together respective edges by a seam, and providing an aperture in a front sidewall of the receptacle wherein a dirt laden air stream enters. Both Maeoka et al and Wnenchak et al disclose an air filter comprising a laminate of non woven fabric made up of polyolefin or polyester fibers or a composite of the non woven fabrics and a PTFE porous film. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the filtration bag of either Giannetta et al or George et al with a filtration bag as taught by any one of Requejo et al, Zhang and Bosses with a layer of PTFE film as taught by either Maeoka et al or Wnenchak et al since PTFE is well known in the art that filter media made from thin membrane of ePTFE, which is particularly light weight and flexible, air flow through the filter element is very high relative to conventional laminated materials and, accordingly, very low energies are required to dislodge the collected dirt from its surface.

Claims 12 and 15 call for the filter bag being square. It would have been obvious to a person having ordinary skill in the art at the time the invention was made to modify the filter bag being square, rectangular, or any other desired shape since it is well settled that mere change of shape without affecting the function of the part would have been an obvious design modifications. Eskimo Pie Corp v. Levous et al 3 USPQ 23.

### ***Response to Arguments***

Applicant's arguments filed on March 22, 2004 have been fully considered but they are not persuasive.

Applicant argues that none of the cited references discloses "a filtration bag made of expanded PTFE". The Examiner newly introduces both the Giannetta et al and George et al as the primary references to show that the vacuum cleaner filtration bag can be made of ePTFE. Giannetta et al discloses a filtration bag for a commercial and residential vacuum cleaner comprising a receptacle for collecting dirt particles and the receptacle being formed from a composite sheet comprised of at least one layer of expanded polytetrafluoroethylene and at least one substrate layer (see Abstract, col. 1, lines 10-14; col. 2, lines 58-62), and a support layer comprising a non-woven polyester, polypropylene, polyethylene, fiberglass or microfiberglass, bonded to one side of a porous expanded PTFE membrane (col. 2, lines 31-33 and lines 58-62). George et al discloses a filtration layer including a microporous fluoropolymer, such as expanded polytetrafluoroethylene (ePTFE) (see Abstract; col. 4, lines 26-29 and lines 40-43) which has efficiency of at least 99.97% at 0.3 microns at a 10.5 ft/min flow rate, more preferably, the efficiency is >99.99% at 0.1 microns at 10.5 ft/min (col. 4, lines 34-35 and lines 57-59). It would have been obvious to a person having ordinary skill in the art at the time the invention was made to provide a filtration bag made of expanded PTFE since it is well-known in the art that the use of expanded PTFE membrane greatly enhances the performance of the filter elements because the particles collected on the surface of the ePTFE, rather than in the depth of the elements as is occurring in the absence of the ePTFE layer (see Giannetta et al, col. 1, lines 49-53).

In response to applicant's arguments, the recitation "disposable" has not been given patentable weight because the recitation occurs in the preamble. A preamble is

generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Applicant's arguments with respect to claims 1-34 as well as the filed affidavit and Exhibits A-C have been thoroughly considered but are moot in view of the new ground(s) of rejections as discussed above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minh-Chau T. Pham whose telephone number is (571) 272-1163. The examiner can normally be reached on Mon/Tues/Thur/Fri 7:00 am - 5:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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A handwritten signature in black ink, appearing to read 'Minh-Chau Pham', written in a cursive style.

**Minh-Chau Pham**

**Patent Examiner**

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**November 5, 2004**